



September 2021
Monthly Project Report

I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION

Report No. 30

Project No. 0064-M06-032



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Prepared by:

Virginia Department of Transportation

www.hrbtextension.org

1. Executive Summary

1.1 Overview

This report provides an overview of accomplishments and activities for the Hampton Roads Bridge-Tunnel Expansion Project from August 22, 2021 – September 18, 2021. The Design-Builder for the project is Hampton Roads Connector Partners (HRCP), a consortium that includes lead contractors Dragados, Vinci, Flatiron, and Dodin Campenon Bernard, with lead designers HDR and Mott MacDonald.

The current reporting period is aligned with HRCP's fiscal-month structure, on which the project's design-build schedule updates and invoiced construction progress are based. Reporting periods typically close on the Saturday on or preceding the 24th of each month.

During this reporting period, the following project accomplishments were recorded:

- The design of the project continues to progress, with 81% of the project construction plans approved as Released for Construction (RFC).
- South Island Progress:
 - All slurry wall panels, including the tunnel approach panels are complete.
 - Placed the first "Y" slurry wall panel capping beam in the Tunnel Boring Machine (TBM) Launch Pit.
 - Completed initial testing of dewatering pumps at the TBM Launch Pit.
 - Completed the first three rows of production jet grouting for the TBM break in/break out section in advance of mass excavation.
- North Island Expansion Progress:
 - Completed fill placement to elevation +5.0'.
 - Continued placement of fill material from elevations +5.0' to +10.0'.
- Placed 1st precast trestle pile bent cap at the North Eastbound Trestle.
- Continued permanent pile driving operations for the North Eastbound and South Trestle.
- Completed pile driving for the Oastes Creek bridge Eastbound widening.
- Completed installation of scupper drains for the existing Bay Avenue Eastbound bridge deck.

1.2 Priorities

The Department's priorities for the Project are to achieve the following objectives:

- To provide mobility enhancements and travel-time reliability along the Project corridor.
- To minimize Project impacts on adjacent communities.
- To improve transportation operations and safety throughout the Project corridor.
- To develop public infrastructure in a financially responsible manner.

1.3 Key Updates

Project Schedule

Schedule updates for this reporting period:

- HRCP is reporting Substantial Completion in accordance with the contract milestone of September 1, 2025.
- HRCP is reporting Final Completion in accordance with the contract milestone of November 1, 2025.
- Approximately 36% of the scheduled time has elapsed to date.

Project Budget

Updates through the preliminary September 2021 payment application, including payment that is pending approval.

- Project budget overview:

Current total project budget:	\$ 3,935,451,641
Total expenditures to date:	\$ 1,100,460,135
Remaining project budget:	\$ 2,834,991,506

- Design-build contract overview:

Design-build contract original amount:	\$ 3,299,997,227
Net change orders:	\$ 17,244,947
Exercised options:	\$ 73,454,414
Design-build contract sum to date:	\$ 3,390,696,588
Expenditures to date:	\$ 1,048,593,373
Remaining design-build contract amount:	\$ 2,388,950,572

- Design-build progress to date:

Overall:	31.04%
Project Management:	31.51%
Design:	80.77%
Physical Construction Progress:	16.02%

Environmental

During this reporting period, HRCP took the following steps in support of environmental management:

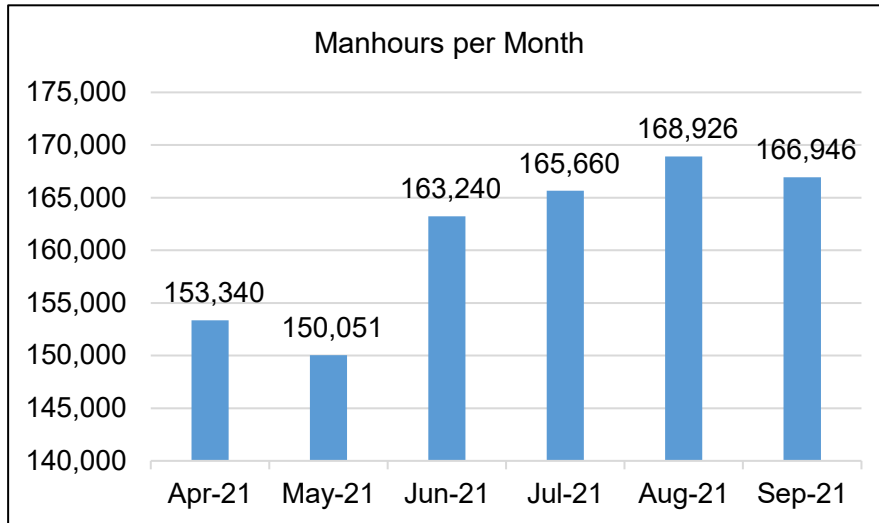
- HRCP received agency approvals on permit modification #5 in late August 2021.
- Bird nesting season officially ended on September 1, 2021. HRCP has continued the use of dogs and handlers to encourage birds to nest away from the project site.
- HRCP initiated a portion of their fish mitigation plan by installing hydrophones near the Willoughby Bay pile driving activities during the last week of August 2021 to collect underwater sound data.
- HRCP submitted an end-of-year status report to NOAA on September 8, 2021, covering the period of July 10, 2020 to July 10, 2021.

Construction

Progress updates for this reporting period include:

- Hampton Landside
 - Began installing temporary drainage near the laydown area at the Mallory St. bridge Westbound off ramp.
 - Continued temporary sidewalk work at Mallory St intersections.
 - Completed demolition of existing median barrier wall along mainline I-64.
- Marine Works
 - At the South MOT Eastbound Trestle, began setting crane mat decking for the first deck span.
 - Continued permanent pile driving operations for the North Eastbound Trestle and South Trestle.
 - Continued placing stone and fill for expansion of the North Island.
- Tunnels and Islands
 - Completed construction of the slurry wall panels for the tunnel approach section at the South Island.
 - Poured the first “Y” slurry wall panel capping beam at the South Island.
 - Continued ground improvement deep soil mixing and jet grouting operations on the South Island.
- Norfolk Landside
 - Completed installation of scupper drains in the existing bridge deck at Bay Avenue.
 - Continued construction of the Eastbound widening for the Bayview Blvd bridge.
 - Continued construction of the Willoughby Bay bridges, Oastes Creek bridge, and Evans St bridge for Eastbound widening.
 - Completed footing construction at Evans St bridge Eastbound.
 - Completed initial clearing and erosion and sediment control measures for the 4th View Interchange area.

The number of construction manhours worked each month is provided by HRCP and is current as of September 30, 2021:



Project Manhours to Date:
2,403,652

Operations

The following operations activities took place during this reporting period:

- Implemented additional lane shifts in Segment 5 (see diagram on page 15 for identification of segment locations).
- Continued a long-term detour at West Evans St. to facilitate bridge widening.
- Continued long-term lane closures at Bay Avenue, Oastes Creek, Mallory St, and Bayview Blvd.
- Held weekly Intelligent Transportation System (ITS) meetings with HRCP.

Quality

Quality updates for this reporting period include:

- VDOT reviewed nine updates to the Construction Quality Management Plan (CQMP) this period.
- VDOT continues to track Owner's Independent Assurance (OIA) and Owner's Verification Sampling and Testing (OVST) requirements and conducts testing as needed.
- VDOT continues to monitor and audit HRCP's material book records for compliance.

Safety

Safety procedures and activities during this reporting period include:

- On the morning of September 16, 2021, a vehicle traveling WB on I-64 near Granby Street entered an overnight lane closure and struck a piece of equipment, resulting in a fatality of the passenger and serious injury to the driver. There were no injuries to the contractor. The incident is under investigation by Virginia State Police.
- VDOT conducts routine safety site visits to promote safe work zones and oversight of HRCP's Safety Program.
- The following safety performance indicator information is provided by HRCP and is current as of September 30, 2021:
 - Total Recordable Incidence Rate: 1.83 (National Average: 2.8)
 - Lost Time Incidence Rate: 0.08 (National Average: 1.1)

Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP has awarded **257** subcontracts, subconsultant agreements, and purchase orders. Contract awards represent a total of **\$355.3 million** to active DBE/SWaM firms on the project.

- HRCP continues to make progress towards its 80-employee On-the-Job Training goal. Three (3) enrollees graduated and were issued Certificates of Completion, with another ten (10) enrollees actively receiving training.
- HRCP continued its promotion of employment opportunities through advertisements in local publications and participation in a hiring event hosted by VEC on September 9, 2021.
- The HRBT Expansion Project Team participated in several business outreach events to promote contracting opportunities and resources available for DBE/SWaM vendors. These events included those hosted by the City of Norfolk, Richmond MBL, ACEC, and VTCA.

Public Outreach & Media

Public outreach and project media updates provided by VDOT and HRCP for this reporting period:

- Presentations to the Poquoson Kiwanis Club, American Public Works Association, LEAD Peninsula, Va. Resort Advisory Commission, and tHRive Young Professionals group.
- Outreach event at the Funk Fest in Virginia Beach and the East Beach Farmer's Market in Norfolk.

2. Project Schedule

2.1 Schedule Status

The following table depicts key milestone dates outlined in the contract requirements. This table will be used as a benchmark to track milestone achievements and has been updated as of the current submitted schedule. The dates below are reflective of the most recent submitted schedule update, which is the Schedule of Record compared with Schedule Update 25.

	Contract Requirement	Schedule of Record Dates	August 2021 (Update 25)	Actual
NTP		Sep 9, 2020	Sep 11, 2020	Sep 11, 2020
Substantial Completion	Sep 1, 2025	Aug 27, 2025	Sep 1, 2025	
Final Completion	Nov 1, 2025	Nov 1, 2025	Nov 1, 2025	

2.2 Longest Path

The longest path to achieve the completion date of the Project Schedule Update 25 is driven by the following activities:

- South Portal Jet Grout Phase 1
- South Portal Approach Slurry walls
- South Portal Launching Pit Capping Beam Cell 1,2,3
- South Portal Launching Pit Excavation Phase 2,3,4
- South Portal Cell 1 Place Lean Concrete
- South Portal Temporary Headwall Cell 1
- Assembly of the Tunnel Boring Machine (TBM) in the launching pit
- TBM drive in High Occupancy Toll (HOT) Tunnel
- North Portal Grout Treatment Plant
- North Portal Receiving Pit Cells 1,2, Preparations works for U-Turn
- TBM U-Turn
- TBM drive in General Purpose (GP) Tunnel
- TBM Disassembly
- South Portal Cut & Cover Structures Phase 4 Cell 1
- South Portal Mechanical, Electrical, and Plumbing (MEP)
- GP Tunnel Site Integration Acceptance
- Tunnel Systems Integration-ITS
- Commissioning and Testing of all Systems (Roadway, Bridges, Structures, Tunnels)
- Substantial Completion

2.3 Impact Analysis

Several elements of work are near-critical and could affect schedule performance if they are not addressed diligently. VDOT and HRCP are closely monitoring these activities. The following work elements have been identified as critical or near critical, meaning there is less than one month of float in the Schedule Update 25:

- South Portal Capping beam for Cell 2 (partial) & 3 (West)
- South Portal Dewatering Report
- South Portal Phase 1 Excavation
- South Portal Demolish Slurry Wall East Side Cell 2
- South Portal Stiffening Columns & Struts
- South Portal Jet Grout Phase 2
- North Portal Receiving Pit Cell 1 Platform
- North Portal Temporary Slab for Slurry Wall Treatment Plant
- South MOT WB Temporary Trestle Procurement
- North Trestle EB Zone 1, 3
- South Trestle EB MOT Zone 3, WB MOT Zone 4
- Bridge at Willoughby Bay

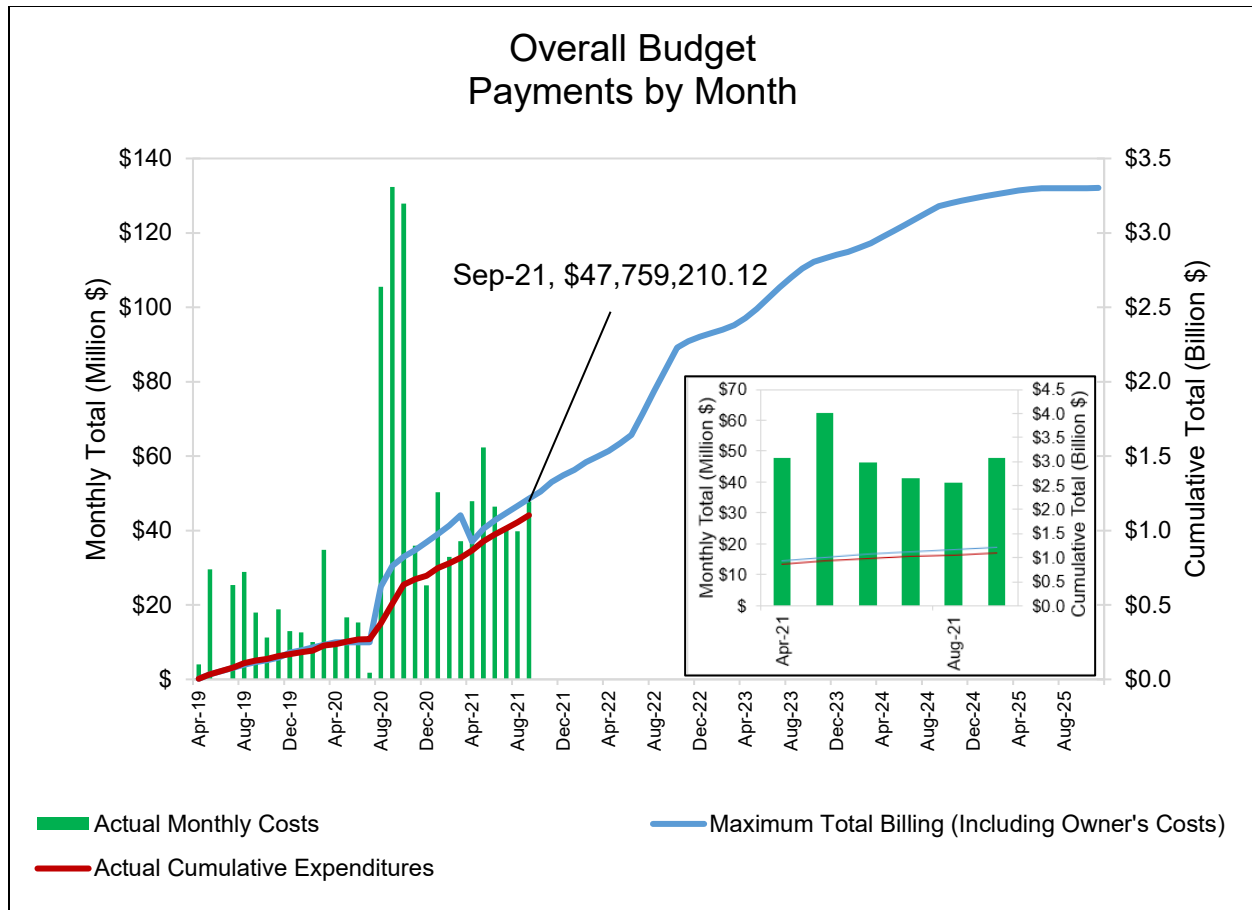
3. Project Budget

3.1 Overall Budget

The overall budget outlined in this report is based on the terms and conditions of Article 3 (Project Funding) in the Project Agreement for Funding and Administration (PAFA). The cost curve is based on Exhibit 6 of the Comprehensive Agreement (monthly maximum cumulative compensation amount).

Note - The following Amounts this Period are pending and inclusive of the preliminary September 2021 payment application.

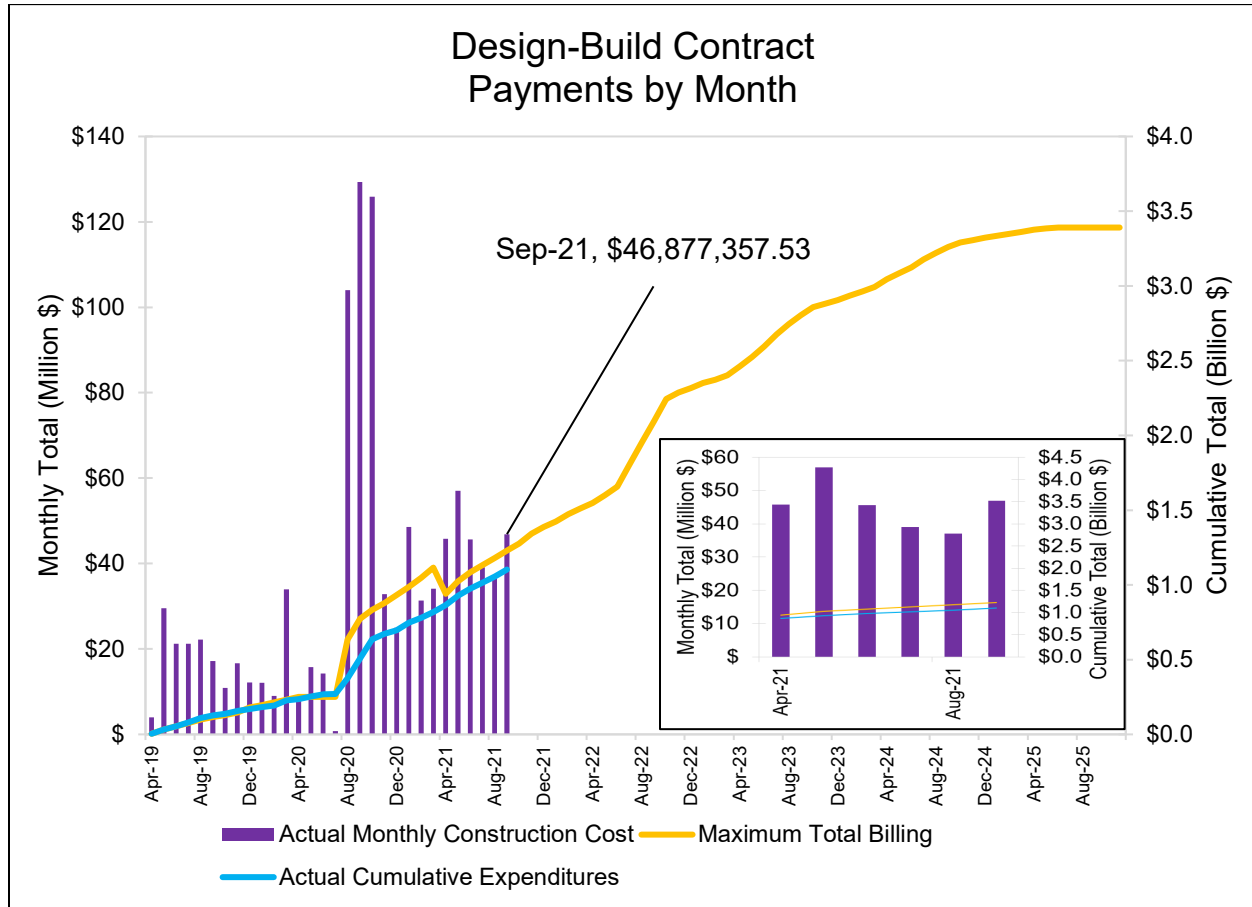
	Amount this Period:	Total to Date:	Original Total Budget:	Total Remaining Budget:	Percent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$46,877,357.53	\$1,048,593,373.34	\$3,299,997,227.00	\$2,251,403,853.66	31.78%
<u>Owner Costs</u>					
<i>Administration</i>	\$875,073.91	\$36,796,728.62	\$122,000,000.00	\$85,203,271.38	30.16%
<i>Right of Way</i>	\$0.00	\$6,526,482.15	\$15,000,000.00	\$8,473,517.85	43.51%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$6,778.68	\$8,543,551.26	\$335,000,000.00	\$326,456,448.74	2.55%
<i>Bridge Repair Work Option</i>	\$0.00	\$0.00	\$73,454,413.96	\$73,454,413.96	0.00%
<u>Total</u>	\$47,759,210.12	\$1,100,460,135.37	\$3,935,451,640.96	\$2,834,991,505.59	27.96%



**The Maximum Total Billing (Including Owner's Costs) is now showing an adjustment in May 2021 due to the executed Change Order #40 - Update Maximum Cumulative Cost Curve.*

3.2 Design-Build Contract Cost Status

The construction budget and planned cost have been established based on the maximum cumulative compensation amount. For this period, the invoiced expenditures (actual construction contract cost) cover the activities noted in this report.



**The Maximum Total Billing (Including Owner's Costs) is now showing an adjustment in May 2021 due to the executed Change Order #40 - Update Maximum Cumulative Cost Curve.*

3.3 Budget by Funding Source

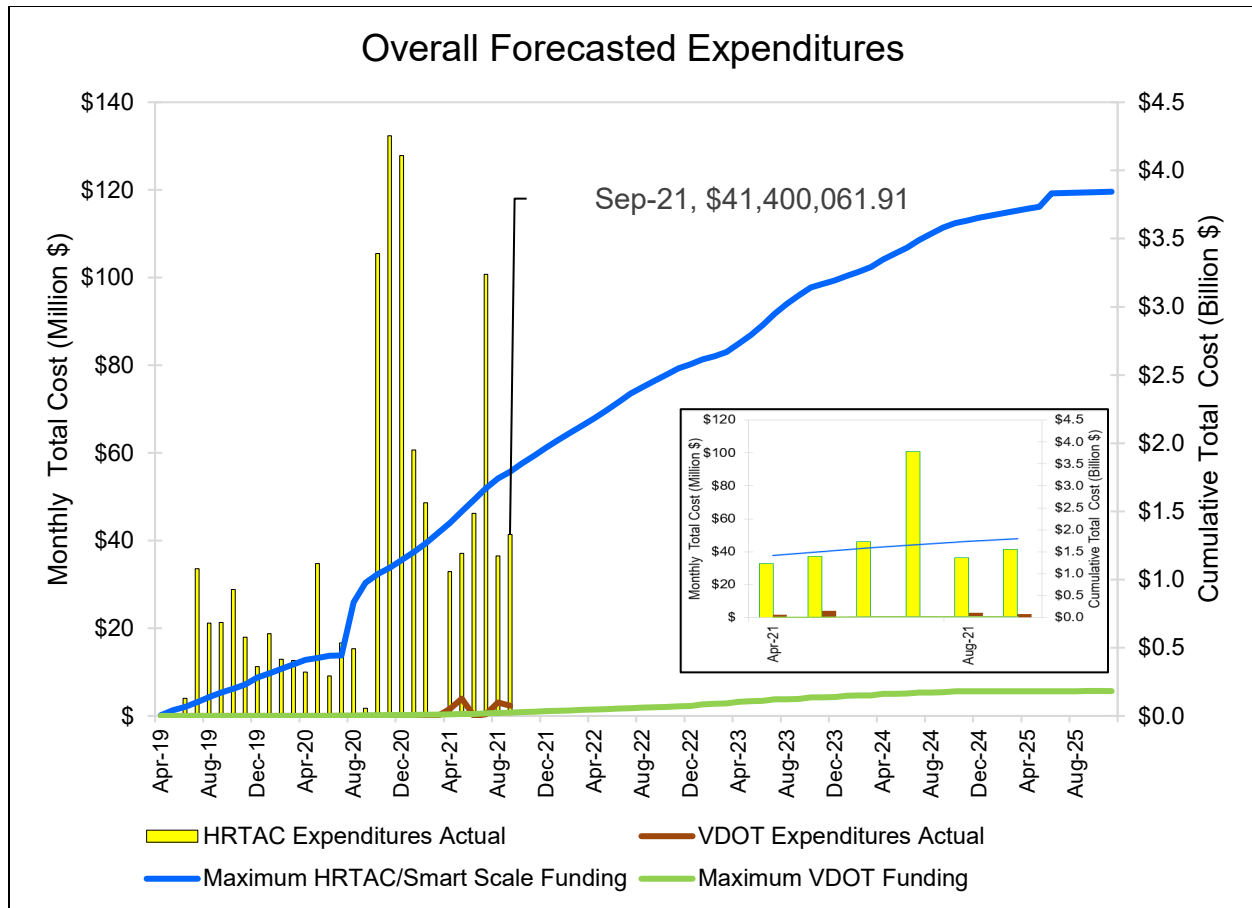
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the Comprehensive Agreement and will be updated as HRCF refines its design, construction means-and-methods, activity sequences, and project resourcing. Amounts this period reflect amounts paid for Construction, Engineering, Administration, Right of Way, and Contingency between August 22, 2021 – September 18, 2021.

3.3.1 HRTAC and Smart Scale

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget Including Smart Scale:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$39,429,332.85	\$999,490,190.01	\$3,204,569,251.00	\$2,205,079,060.99	31.19%
<u>Owner Costs</u>					
<i>Administration</i>	\$1,958,651.03	\$31,790,150.84	\$118,472,054.00	\$86,681,903.16	26.83%
<i>Right of Way</i>	\$12,078.03	\$6,504,255.97	\$15,000,000.00	\$8,495,744.03	43.36%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$0.00	\$4,143,414.76	\$325,428,277.00	\$321,284,862.24	1.27%
<u>Total</u>	\$41,400,061.91	\$1,041,928,011.58	\$3,753,469,581.00	\$2,711,541,570.42	27.76%

3.3.2 VDOT

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$2,233,389.00	\$8,736,737.76	\$95,427,976.00	\$86,691,238.24	9.16%
<u>Owner Costs</u>					
<i>Administration</i>	\$84,003.53	\$769,160.00	\$3,527,946.00	\$2,758,786.00	21.80%
<i>Right of Way</i>	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
<i>Contingency</i>	\$0.00	\$487,015.64	\$9,571,724.00	\$9,084,708.36	5.09%
<i>Bridge Repair Work Option</i>	\$0.00	\$0.00	\$73,454,413.96	\$73,454,413.96	0.00%
<u>Total</u>	\$2,317,392.53	\$9,992,913.40	\$181,982,059.96	\$171,989,146.56	5.49%



3.4 Contingency

Contract Changes

	Description	Date	Value	Time
CO-1	Department's Acquisition of Willoughby Staging Area	2/11/2020	\$ (3,000,000.00)	0 days
CO-2	Minor Revisions to Technical Requirements	3/18/2020	\$ -	0 days
CO-3	Tunnel Approach Structure Support of Excavation Requirements Refinement	4/28/2020	\$ -	0 days
CO-4	Dispute Resolution Board (DRB) Allowance	5/12/2020	\$ 200,000.00	0 days
CO-5	North Island Armor Stone Value Engineering Change Proposal (VECP)	4/28/2020	\$ (2,011,117.50)	0 days
CO-6	Exit Ramp at Bayville Avenue	5/29/2020	\$ 46,906.29	0 days
CO-7	Minor revisions to the Technical Requirements	7/16/2020	\$ -	0 days
CO-8	Zero Spread Drainage	9/16/2020	\$ 3,239,212.24	0 days
CO-9	Roadway and Bridge Scope Validation Issues	9/4/2020	\$ 15,516,248.00	0 days
CO-10	Slurry Walls as Permanent Structures	8/28/2020	\$ -	0 days
CO-12	Road and Bridge Lighting Requirements	8/27/2020	\$ 2,495,000.00	0 days

CO-13	Bridge Repair Work-Exercise Option	10/9/2020	\$ 73,454,313.00	0 days
CO-14	Trestle Barrier Form Liner elimination	7/29/2020	\$ (99,571.80)	0 days
CO-15	South Island Ground Improvement Value Engineering Change Proposal (VECP)	9/17/2020	\$ (5,338,000.00)	0 days
CO-16	Navy Security Fencing Design	7/15/2021	\$ 150,000.00	0 days
CO-17	Westbound ITT Reduced Instrumentation	10/30/2020	\$ (184,277.50)	0 days
CO-18	Willoughby Bay Bridge Barriers	9/10/2020	\$ -	0 days
CO-19	GeoPak Version Software Updates	8/3/2020	\$ -	0 days
CO-21	Material Price Adjustment for Asphalt Materials	2/26/2021	\$ -	0 days
CO-22	South Island Asbestos Conduits	9/16/2020	\$ 81,973.93	0 days
CO-23	Island & Tunnel Baseline Monitoring Requirements	7/22/2020	\$ -	0 days
CO-24	Construction Water Supply	9/10/2020	\$ (609,157.27)	0 days
CO-25	Solids Handling Pumps Requirements	11/12/2020	\$ -	0 days
CO-26	Mass Notification Independent System Requirements	11/12/2020	\$ -	0 days
CO-27	Fixed Fire Fighting System Requirements	11/16/2020	\$ -	0 days
CO-28	Hot Lane Shoulder Width	3/29/2021	\$ 2,950,000.00	0 days
CO-30	Willoughby Bay Bridges Fender & Lighting Replacement	2/12/2021	\$ 1,495,000.00	0 days
CO-32	VCU Fisheries and SAV Mitigation Plan	4/16/2021	\$ (1,042,144.00)	0 days
CO-33	Tunnel Finishes Height	12/18/2020	\$ -	0 days
CO-38	H-Piles in Aggressive Soils	12/18/2020	\$ (47,541.00)	0 days
CO-39	Re-use of existing drainage pipes	4/20/2021	\$ (100,984.25)	0 days
CO-40	Update Maximum Cumulative Cost Curve	7/15/2021	\$ -	0 days
CO-41	Wetland Mitigation Costs	4/26/2021	\$ 3,503,400.00	0 days
CO-43	Hybrid Trestle Beam Design	7/2/2021	\$ -	0 days
CO-44	SCADA Control of Deluge Valves	7/27/2021	\$ -	0 days
CO-45	HRCP Project Executive/Representative Change	5/24/2021	\$ -	0 days
CO-46	Tunnel Sprinkler Heads Material Change	7/28/2021	\$ -	0 days
CO-49	HRCP Senior Representative Change	7/2/2021	\$ -	0 days
TOTAL			\$ 90,699,260.14	0 days

**The total change order dollar amount figure has been updated to include the Bridge Repair Work-Exercise Option amount.*

Material Price Adjustments

- No new activities.

4. Environmental

HRCP has completed or is performing several compliance tasks included in permit conditions:

Permits - HRCP received all agency approvals related to permit modification #5 between August 20 and August 26, 2021. Virginia Marine Resources Commission (VMRC) provided authorization of the changes on August 26, 2021, DEQ provided authorization on August 20, 2021, and USACE approved permit modification #5 on August 24, 2021. HRCP held an additional onsite meeting with DEQ staff on August 31, 2021 to review the air permit applications for the North and South Island's temporary generators. DEQ requested additional information from HRCP regarding detailed generator information and HRCP continues to work through permitting requirements related to this equipment.

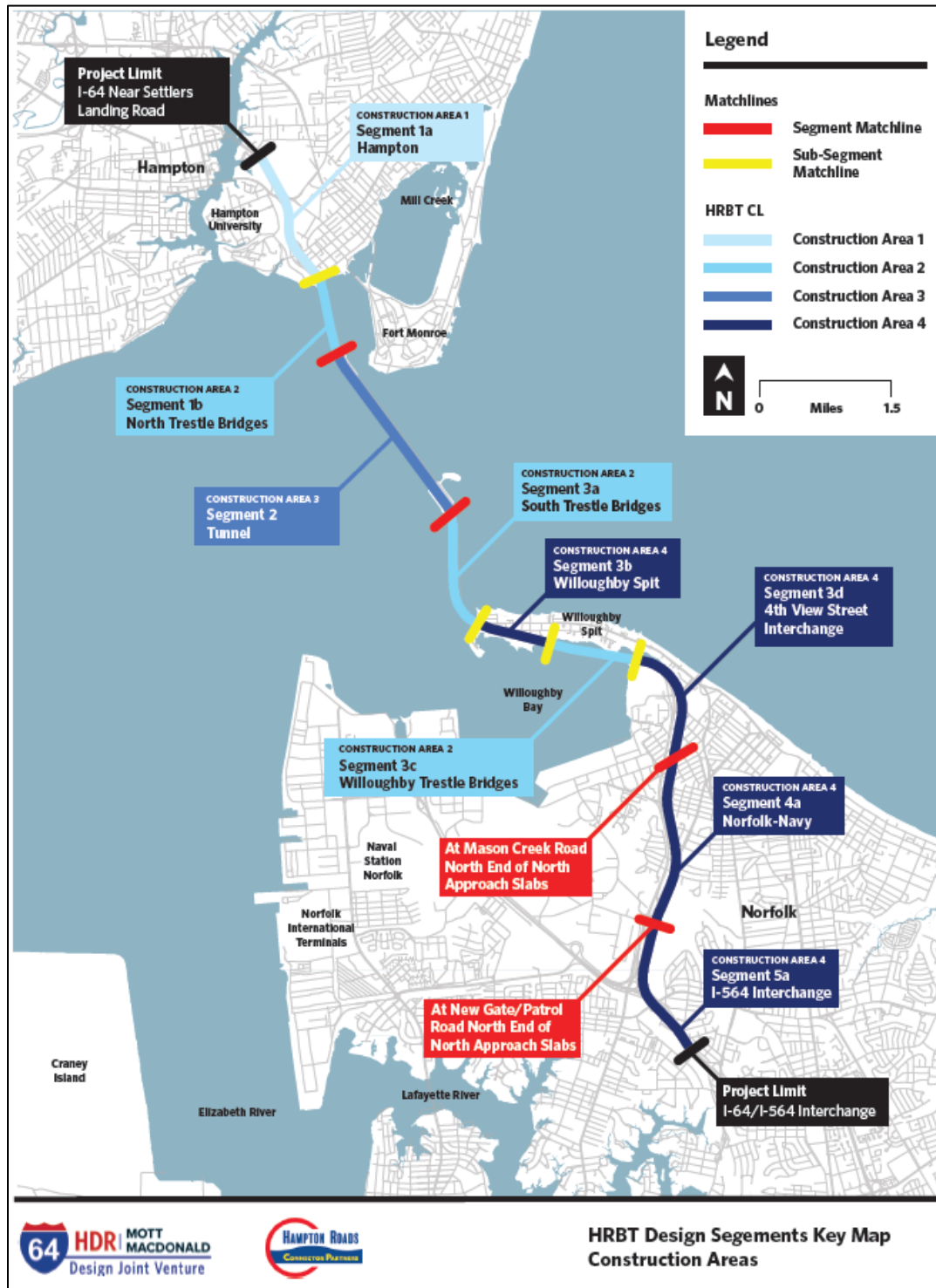
National Oceanic Atmospheric Administration (NOAA)/Proposed Rule - All remaining pile driving activities are being covered by the Letter of Authorization (LOA), which is valid through April 1, 2026. HRCP submitted a required annual report to NOAA on September 8, 2021 that summarized activities between July 10, 2020 and July 10, 2021.

Bird Mitigation - Bird nesting season officially ended on September 1, 2021. HRCP has continued the use of dogs and handlers to encourage birds remaining to nest/keep away from the project site.

Archeological Discoveries - No archaeological discoveries occurred during the reporting period. VDOT and the William and Mary Center for Archaeological Resources continue to assess the timbers/stones found near the North Island Expansion to address Virginia Department of Historic Resources comments.

5. Construction

The figure below illustrates the project limits and the four construction areas throughout the project identified by HRCP.



5.1 Construction Area 1: Hampton Landside

During the reporting period, HRCP performed the following work in Area 1:

Mallory St - HRCP is in the process of widening Mallory Ramps and began installing temporary drainage near the laydown area at the Westbound off ramp. HRCP continued temporary sidewalk work, temporary signals, and ITS work at intersections.

Mainline I-64 - HRCP completed demolition of existing median barrier wall throughout mainline I-64.

5.2 Construction Area 2: Marine Work

During the reporting period, HRCP performed the following work in Area 2:

North 2 Temporary Construction Trestle - HRCP completed current phase of this work. Next phase will commence upon acceptance of temporary construction barrier installation on the existing Westbound bridge deck.

Permanent Eastbound North Trestle - Continued pile driving operations and installation of precast caps.

South 1 Temporary Construction Trestle - Trestle installation will resume following HRCP's removal of known sunken vessel obstruction, which is currently in preparation.

South MOT Eastbound Trestle - HRCP welded steel caps on shims to pile top hats (flat plates welded to the head of the piles for platform and beam support), set bearing devices, grillage beams, and began setting crane mat decking for the first deck span.

Permanent South Trestle - HRCP continued pile driving operations.

North Island Expansion Work - HRCP completed placement of soil fill material to elevation +5.0'. Additionally, HRCP has completed 6 out of 8 sections for production vibrocompaction to elevation +5.0'. HRCP continued placing stone from elevation +5.0' to +12.0'. HRCP also continued removing armor stone from the west side of the existing North Island in advance of future tunnel and portal work.



◀ **North Island**
Expansion activities.



◀ **South Trestle**
Pile driving operations.

5.3 Construction Area 3: Tunnels and Islands

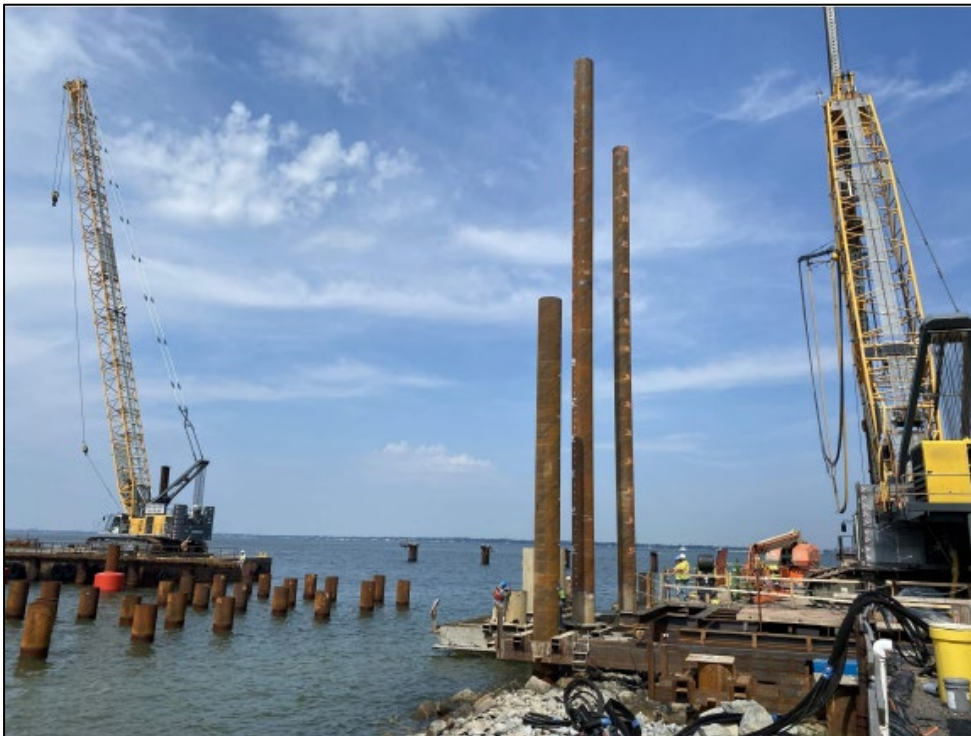
During the reporting period, HRCP performed the following work in Area 3 at the South Island:

Slurry Wall Construction - HRCP completed construction of the slurry wall panels for the tunnel approach structure.

Conveyor & TBM Quay Installation - HRCP continued constructing the gantry structure for the conveyor. Continued driving the remaining piles for the TBM quay at the interface between the onshore and offshore piles.

Ground Improvement Operations - HRCP continued deep soil mixing and jet grouting for the TBM break in/break out block.

Capping Beams - Continued removal of slurry wall panel tops and rebar installation for capping beams at the TBM Launch Pit. Concrete was poured for the first “Y” slurry wall panel capping beam. Also, capping beam production for the tri-cell shaft continued and is 14% complete.



◀ South Island

Installation of quay piles and offshore gantry rail for the TBM quay



◀ South Island

Tying rebar for the TBM Launch Pit Cell 3 capping beam.

5.4 Construction Area 4: Norfolk Landside

During the reporting period, HRCP performed the following work in Area 4:

Bay Avenue Bridge - HRCP completed installing scupper drains in the existing bridge deck.

Bayview Blvd Bridge - HRCP continued Eastbound widening pile driving.

Evans St Bridge - HRCP completed construction of footings for Piers 1 and 2.

4th View Interchange - HRCP completed initial clearing and installation of erosion and sediment control measures for the area around 4th View.

Oastes Creek Trestle - HRCP continued pile driving for Eastbound bridge widening. Precast concrete casting operations continued for pile caps at the off-site yard in Chesapeake.

Willoughby Bay Trestle - HRCP continued pile driving for Eastbound trestle widening.



◀ **Mainline I-64 - Hampton**
Median barrier removal.



◀ **Evans St**
Construction of footings for Piers
1 and 2.

6. Operations

Operations activities include shoulder and lane closures, creation and maintenance of Intelligent Transportation System (ITS) architecture, other maintenance within the corridor, coordination with existing VDOT Operations, and communication with the Hampton Roads Harbor Tunnels (HRHT) facility staff. The following operations activities occurred during this reporting period:

Shoulder Work & Maintenance - HRCP conducted maintenance of survey equipment used for tunnel baseline instrumentation and monitoring (I&M), installation of I&M equipment, shoulder strengthening/leveling, median drainage work, clearing and grubbing, substructure concrete pours, and routine maintenance activities.

Long-Term Lane Closures - HRCP continued lane closure at Bay Avenue in Norfolk to facilitate access to a staging area for the widening of the Oastes Creek Bridge. Lane closures also continued at Bayview Blvd and Mallory St to facilitate bridge widening.

Hampton Lane Shifts - No new activities to report.

Norfolk Lane Shifts - Implemented additional lane shifts on I-64 WB in Segment 5. Installed barrier wall in Segments 3 and 4 (see diagram on page 15 for identification of segment locations).

Mallory St Bridge - HRCP continued initial works to support the Mallory Street Bridge replacement, including upgrades for temporary pedestrian detours, ramp shoulder strengthening, resetting of guardrail, and nightly interstate lane closures.

Detours - HRCP continued a long-term detour at West Evans St. to facilitate bridge widening. Also continued nightly temporary detours on the West Bay Ave on-ramp for bridge widening work. HRCP also began nightly temporary detours on the West Bay Ave off-ramp for bridge widening work.

Meetings - Weekly Intelligent Transportation System (ITS) meetings with HRCP to discuss any issues and upcoming activities continue.

Routine Maintenance - HRCP performed routine incident management and maintenance operations within the corridor. VDOT continues to monitor HRCP's performance with respect to the approved maintenance management plan.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates - VDOT reviews these updates as part of final “Released for Construction” (RFC) design packages and “Notice of Design Change” (NDC) packages. There were nine updates reviewed this period, including the CQMP Update for the Tunnel Lining Segment Precast Production. These updates included specific testing and inspection plans for the work shown in the corresponding RFC plans and a staffing matrix showing quality assurance and quality control staffing for the work.

Independent Assurance (IA) Testing Activities - VDOT continues to monitor HRCP’s QA and QC material testing. VDOT has also performed Independent Testing and Verification Testing on materials in accordance with Department requirements and coordinates with VDOT Materials Department for shop inspections as required. This testing includes oversight of the HRCP Precast Yard in Chesapeake.

Quality Management System Plan (QMSP) - VDOT continues to engage HRCP in discussions on HRCP’s implementation of their QMSP and the effectiveness of the plan. HRCP submitted version 11 of the QMSP to VDOT for review.

Quarterly Updates of Quality Plans - HRCP submitted the quarterly updates of the Quality Management System Plan, Construction Management Quality Plan, and the Design Quality Management Plan for the second quarter of 2021. VDOT completed the reviews of these documents and returned them to HRCP.

Tunnel Quality Plan (TQP) - HRCP continues to update their Tunnel Quality Plan and address VDOT’s comments. The current focus of the plan is the quality procedures needed to begin precast production of the tunnel lining segments. This production is scheduled to begin in October 2021. The TQP Rev 2 was reviewed this period and returned to HRCP with comments.

Material Book Records - VDOT has completed and closed audits of two volumes of material book records. HRCP continues to submit records for subsequent volumes of material books according to the established audit schedule. VDOT also conducted a monthly review of the current records. HRCP is responding to audit comments provided by VDOT.

Routine Quality Activities - VDOT conducted reviews of deficiencies and nonconformance reports (NCRs) and coordinated with the resident engineers for acceptance of root cause analyses and dispositions of deficiencies. VDOT also conducted reviews of QA and QC records for accuracy and quality issues and coordinated documentation reviews through VDOT’s Material Department.

8. Safety

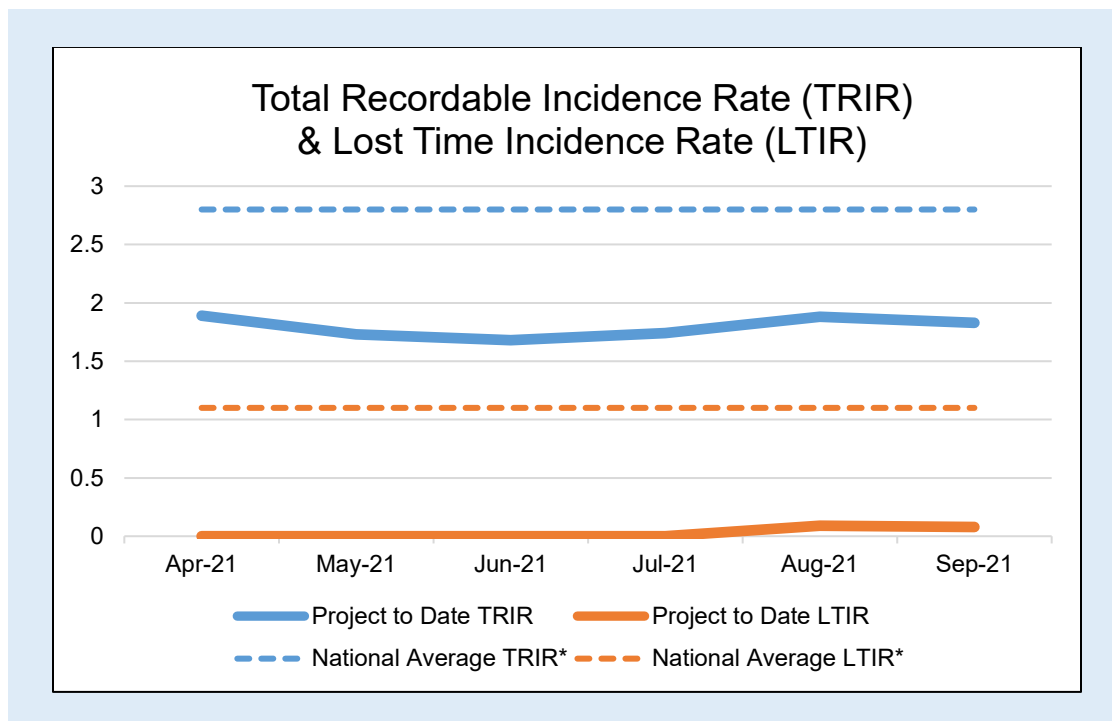
Safety procedures and activities during this reporting period include:

COVID-19 Policies - Pursuant to new guidelines and recommendations received from the Commonwealth of Virginia, all employees are required to wear a facemask or a face covering when in common areas, in conference meeting rooms, when multiple persons are present, and in open cubicles, and in multiple workstation settings. With the Delta Variant case increase around the United States, VDOT and HRCP are continuing to monitor COVID-19 recommendations for project personnel.

Safety Site Visits - VDOT continued to conduct routine site visits to promote safe work zones.

Work Zone Incident - On the early morning of September 16, 2021, a vehicle traveling at a high rate of speed on I-64 Westbound near Granby Street entered an overnight lane closure and struck a piece of equipment, resulting in a fatality of the passenger and serious injury to the driver. There were no injuries to project personnel. The incident is under investigation by Virginia State Police.

Safety Performance Indicators - The following safety performance indicator information is provided by HRCP and is current as of September 30, 2021.



**National averages are from the Bureau of Labor Statistics, US Department of Labor – 2019 Data for Construction Industry, Published November 4, 2020.*

9. Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP has awarded **257** subcontracts, subconsultant agreements, and purchase orders. Contract awards represent a total of **\$355.3** million to active DBE/SWaM firms on the project

Compliance Activities

- VDOT, HRCP, and FHWA representatives met on September 7, 2021 to discuss civil rights compliance matters on the project. Discussions also included the review of HRCP's procurement process, prompt payment provisions, and contractor inquiries.

Workforce Development Activities:

- HRCP continued to make progress towards its 80-employee On-the-Job Training (OJT) contract goal. To date, three (3) enrollees graduated with ten (10) active candidates in the program.
- HRCP continued its hiring advertising campaign with the support of *New Journal & Guide*, *The Virginia Legacy*, and *American DBE Magazine*.
- During this period, the HRBT team participated in the following employment outreach event:
 - Virginia Employment Commission (VEC), Live, Love & Work in Virginia Virtual Hiring Event – September 9, 2021

Business Opportunity Activities:

- City of Norfolk & STOP Organization's Inaugural Community Connect Resource Expo – August 28, 2021 (Norfolk)
- American Council of Engineering Companies of Virginia & VDOT Virtual Town Hall – August 31, 2021
- Virginia Transportation Construction Alliance's Fall Transportation Conference – September 8, 2021 (Norfolk)
- Richmond Metropolitan Business League (MBL) Corporate Partner Exchange – September 9, 2021 (Henrico)
- HRCP & VDOT continue to make plans for the Annual HRBT DBE/SWaM Opportunity Conference scheduled for October 27, 2021 as a virtual event.



Above: City of Norfolk & STOP Organization joint Community Connect Resource Expo announcement.

Left: Project team members with Norfolk councilwoman Mamie Johnson, who visited VDOT and HRCP's exhibit to thank representatives for participating in their first community-wide event hosted by Ward 3.

10. Public Outreach & Media

The following public outreach and project media activities occurred in this period:

Public Outreach

- August 24, 2021 – HRBT Expansion Project Team presented to the Virginia Society of Professional Engineers
- August 26, 2021 – HRBT Expansion Project Team presented to the American Public Works Association
- August 27 & 28, 2021 – HRBT Expansion Project Communications Team community outreach at the Funk Fest in 24th Street Park at the Oceanfront



- August 31, 2021 – HRBT Expansion Project Team presented to the Poquoson Kiwanis Club
- September 1, 2021 – HRBT Expansion Project Team presented to LEAD Peninsula
- September 2, 2021 – HRBT Expansion Project Team presented to the Va. Resort Advisory Commission
- September 11, 2021 – HRBT Expansion Project Communications Team community outreach at the East Beach Farmer's Market in Norfolk
- September 15, 2021 – HRBT Expansion Project Team presented to tHRive Young Professionals group

Media

- September 17, 2021: WAVY-TV 10 and Wavy.com – story titled “HRBT expansion is moving full speed ahead” providing a project update.

Visit our website to view more information:

www.hrbtexansion.org